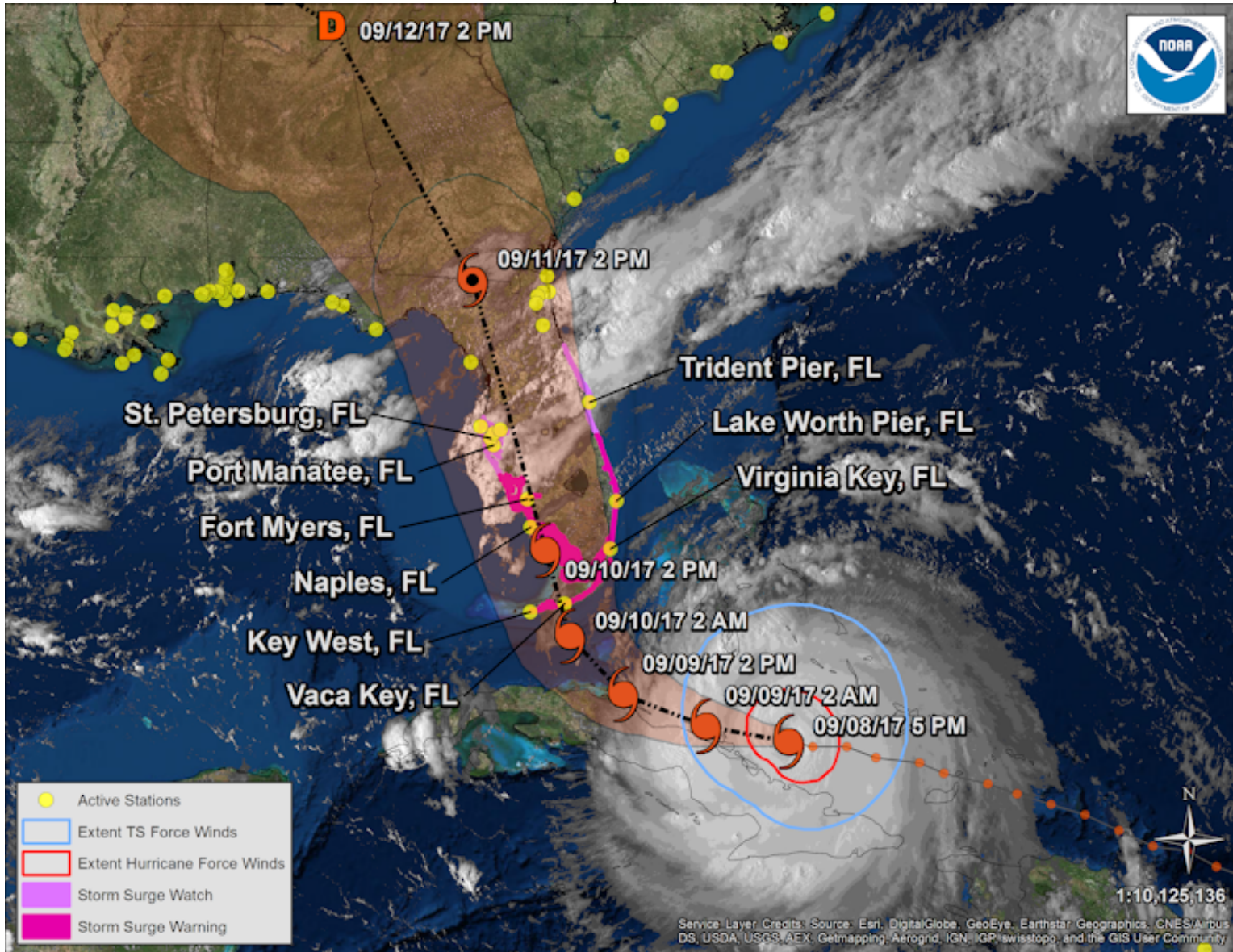




# Hurricane IRMA QuickLook Posted: 18:00 EDT 09/08/2017

## NOAA and NOAA Partnership Stations Relative to the Storm



## Storm Analysis

As of 09/08/2017 18:00 EDT, water levels along the coast of southern Florida, from Trident Pier to St. Petersburg, are at or near normal tide levels and range between 0.1 and 0.7 feet above predictions.

Winds across the Florida Peninsula are measuring 5 to 20 knots with some gusts up to 30 knots. Barometric pressure is beginning to fall along the Florida Keys.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: AC

-----

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Irma Advisory Number 39  
NWS National Hurricane Center Miami FL  
500 PM EDT Fri Sep 08 2017

...HURRICANE CONDITIONS SPREADING WESTWARD OVER PORTIONS OF CUBA AND THE CENTRAL BAHAMAS...

...HURRICANE WARNINGS EXTENDED NORTHWARD ALONG THE FLORIDA PENINSULA...

SUMMARY OF 500 PM EDT...2100 UTC...INFORMATION

-----

LOCATION...22.1N 76.5W  
ABOUT 195 MI...310 KM E OF CAIBARIEN CUBA  
ABOUT 345 MI...555 KM SE OF MIAMI FLORIDA  
MAXIMUM SUSTAINED WINDS...155 MPH...250 KM/H  
PRESENT MOVEMENT...W OR 280 DEGREES AT 12 MPH...19 KM/H  
MINIMUM CENTRAL PRESSURE...925 MB...27.32 INCHES

WATCHES AND WARNINGS

-----

CHANGES WITH THIS ADVISORY:

The Hurricane Warning has been extended northward for east coast of Florida to Sebastian Inlet, and along the west coast of the peninsula northward to Anna Maria Island.

The Hurricane Watch has been extended northward along the west coast of Florida to Suwannee River.

A Storm Surge Watch has been issued north of Venice to the Anclote River, including Tampa Bay, and from Ponce Inlet to the Flagler/ Volusia County Line.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...

- \* Sebastian Inlet southward around the Florida peninsula to Venice
- \* Florida Keys

A Storm Surge Watch is in effect for...

- \* North of Sebastian Inlet to the Flagler/Volusia County line
- \* North of Venice to Anclote River
- \* Tampa Bay

A Hurricane Warning is in effect for...

- \* Sebastian Inlet southward around the Florida peninsula to Anna Maria Island
- \* Florida Keys
- \* Lake Okeechobee
- \* Florida Bay
- \* Southeastern Bahamas
- \* Cuban provinces of Camaguey, Ciego de Avila, Sancti Spiritus, and Villa Clara
- \* Central Bahamas
- \* Northwestern Bahamas

A Hurricane Watch is in effect for...

- \* North of Sebastian Inlet to the Flagler/Volusia County Line
- \* North of Anna Maria Island to the Suwannee River
- \* Cuban provinces of Guantanamo, Holguin, Las Tunas and Matanzas

A Tropical Storm Warning is in effect for...

- \* Cuban provinces of Guantanamo, Holguin, and Las Tunas

A Storm Surge Warning means there is a danger of life-threatening inundation, from rising water moving inland from the coastline, during the next 36 hours in the indicated locations. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at [hurricanes.gov](http://hurricanes.gov). This is a life-threatening situation. Persons located within these areas should take all necessary actions to protect life and property from rising water and the potential for other dangerous conditions. Promptly follow evacuation and other instructions from local officials.

A Storm Surge Watch means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at [hurricanes.gov](http://hurricanes.gov).

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

Interests elsewhere in Cuba, Florida, and the southeastern United States should monitor the progress of Irma.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

## DISCUSSION AND 48-HOUR OUTLOOK

-----  
At 500 PM EDT (2100 UTC), the eye of Hurricane Irma was located near latitude 22.1 North, longitude 76.5 West. Irma is moving toward the west near 12 mph (19 km/h), and a turn toward the northwest is expected by late Saturday. On the forecast track, the eye of Irma should continue to move near the north coast of Cuba and the central Bahamas

tonight and Saturday, and be near the Florida Keys and the southern Florida Peninsula Sunday morning.

Maximum sustained winds are near 155 mph (250 km/h) with higher gusts. Irma is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are likely to continue during the next day or two, and Irma is expected to remain a powerful category 4 hurricane as it approaches Florida.

Hurricane-force winds extend outward up to 70 miles (110 km) from the center and tropical-storm-force winds extend outward up to 185 miles (295 km).

The estimated minimum central pressure is 925 mb (27.32 inches).

#### HAZARDS AFFECTING LAND

-----  
**STORM SURGE:** The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water is expected to reach the following HEIGHTS ABOVE GROUND if the peak surge occurs at the time of high tide...

SW Florida from Captiva to Cape Sable...8 to 12 ft  
Cape Sable to Boca Raton including the Florida Key...5 to 10 ft  
Venice to Captiva...5 to 8 ft  
Anclote River to Venice including Tampa Bay...3 to 5 ft  
Boca Raton to Flagler/Volusia County line...3 to 6 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

The combination of a life-threatening storm surge and large breaking waves will raise water levels ABOVE NORMAL TIDE LEVELS by the following amounts within the hurricane warning area near and to the north of the center of Irma. Near the coast, the surge will be accompanied by large and destructive waves.

Southeastern and central Bahamas...15 to 20 ft  
Northwestern Bahamas...5 to 10 ft  
Northern coast of Cuba in the warning area...5 to 10 ft

**WIND:** Hurricane conditions are still occurring in portions of the southeastern and Central Bahamas. Hurricane conditions are expected to continue within the hurricane warning area along the north coast of Cuba through Saturday. Hurricane conditions are expected in the northwestern Bahamas tonight and Saturday, and in portions of southern and central Florida and the Florida Keys Saturday night or early Sunday.

Hurricane conditions are possible within the watch area in central and north Florida by Sunday, with tropical storm conditions possible by late Saturday.

**RAINFALL:** Irma is expected to produce the following rain accumulations through Tuesday night:

Dominican Republic, Haiti, and Turks and Caicos...additional 1 to 3 inches.  
Southern Bahamas and northern Cuba...10 to 15 inches, isolated 20 inches.  
Southern Cuba...4 to 8 inches, isolated 12 inches.  
Jamaica...1 to 2 inches.  
The Florida Keys, much of the Florida peninsula, and southeast Georgia...8 to 15 inches, isolated 20 inches.

Western and Northern Florida peninsula from Tampa northward...4 to 8 inches, isolated 12 inches.  
Rest of Eastern Georgia, western South Carolina, and Western North Carolina...4 to 7 inches.  
Western Georgia, eastern and northern Alabama, and southern Tennessee...2 to 5 inches.

In all areas this rainfall may cause life-threatening flash floods and, in some areas, mudslides.

TORNADOES: A few tornadoes will be possible beginning Saturday morning across south Florida.

SURF: Swells generated by Irma are affecting the southeastern Bahamas, the Turks and Caicos Islands, the northern coast of the Dominican Republic, and should start affecting portions of the southeast coast of the United States tonight. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

#### NEXT ADVISORY

-----

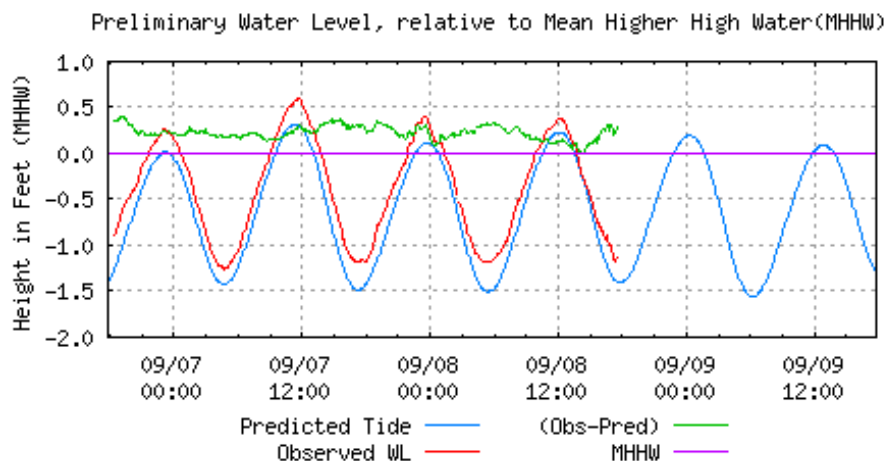
Next intermediate advisory at 800 PM EDT.  
Next complete advisory at 1100 PM EDT.

Forecaster Avila

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Key West - Water Level](#), [Key West - Winds](#), [Key West - Barometric](#), [Vaca Key - Water Level](#), [Vaca Key - Winds](#), [Vaca Key - Barometric](#), [Virginia Key - Water Level](#), [Virginia Key - Winds](#), [Virginia Key - Barometric](#), [Lake Worth Pier - Water Level](#), [Lake Worth Pier - Winds](#), [Trident Pier - Water Level](#), [Trident Pier - Winds](#), [Naples - Water Level](#), [Naples - Winds](#), [Naples - Barometric](#), [Fort Myers - Water Level](#), [Fort Myers - Winds](#), [Fort Myers - Barometric](#), [Port Manatee - Water Level](#), [St Petersburg, Tampa Bay - Water Level](#), [St Petersburg, Tampa Bay - Winds](#)

NOAA/NOS/CO-OPS 8724580 Key West, FL



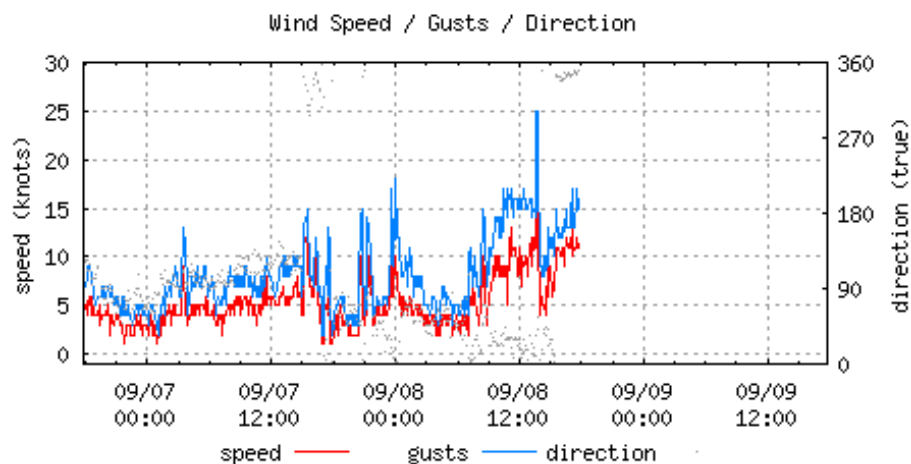
Last Observed Sample: 09/08/2017 17:48 (EDT). Data relative to MHHW

Observed: -1.11 ft. Predicted: -1.41 ft. Residual: 0.30 ft.

Historical Maximum Water Level: Oct 24 2005, 3.14 ft.

Next High Tide: 09/09/2017 00:18 (EDT), 0.19 ft.

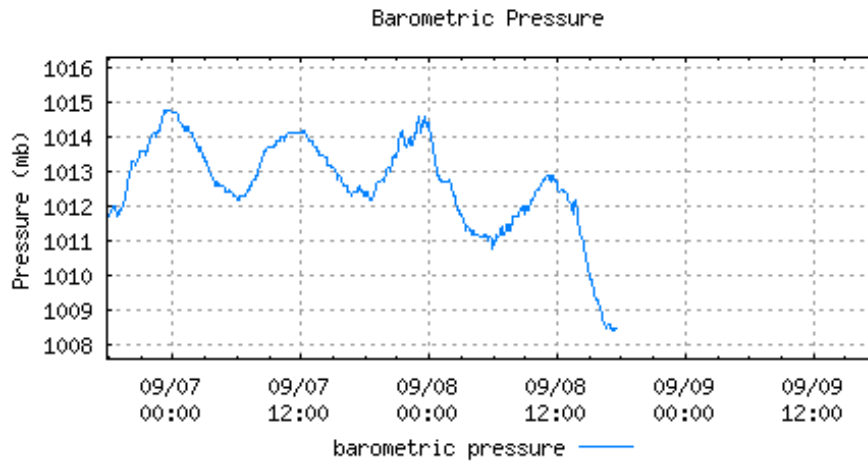
NOAA/NOS/CO-OPS 8724580 Key West, FL



Last Observed Sample: 09/08/2017 17:48 (EDT)

Wind Speed: 12 knots Gusts: 14 knots Direction: 346° T

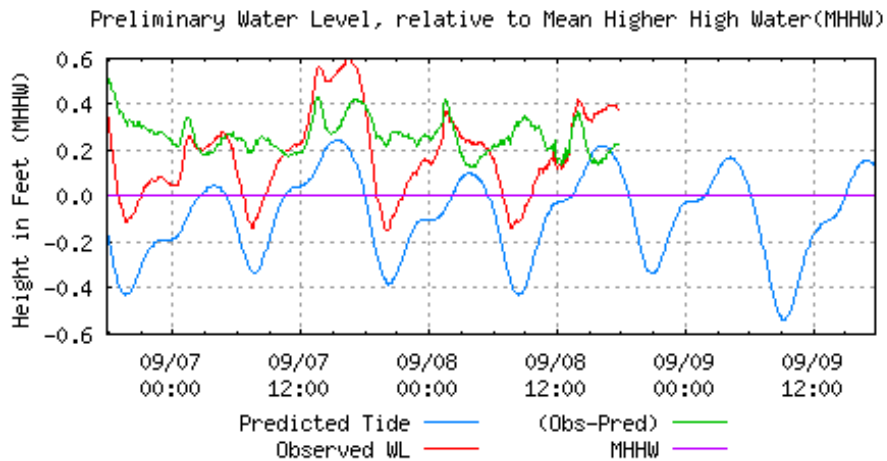
NOAA/NOS/CO-OPS 8724580 Key West, FL



Last Observed Sample: 09/08/2017 17:48 (EDT)

Barometric Pressure: 1008.5 mb

NOAA/NOS/CO-OPS 8723970 Vaca Key, FL



Last Observed Sample: 09/08/2017 17:42 (EDT). Data relative to MHHW

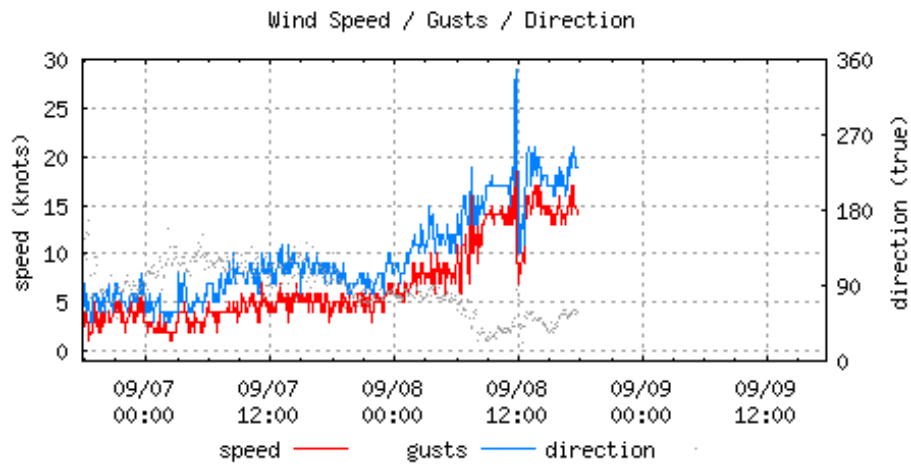
Observed: 0.38 ft. Predicted: 0.15 ft. Residual: 0.23 ft.

Historical Maximum Water Level: Oct 24 2005, 5.80 ft.

Next High Tide: 09/09/2017 04:10 (EDT), 0.17 ft.



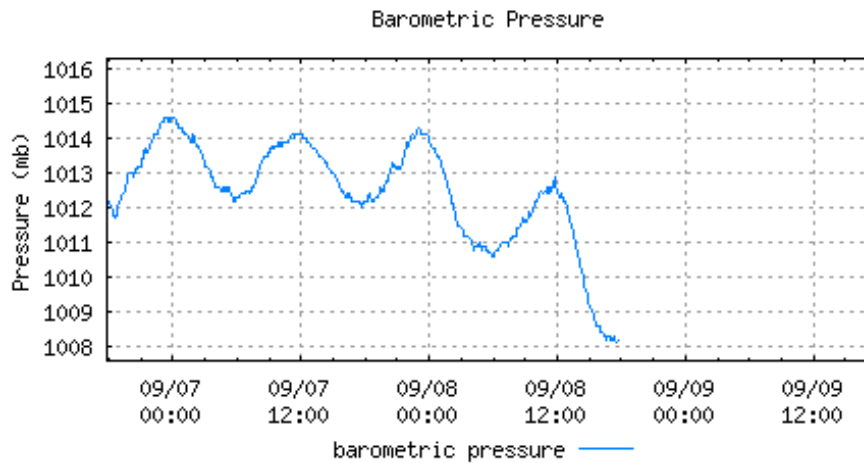
NOAA/NOS/CO-OPS 8723970 Vaca Key, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Wind Speed: 14 knots Gusts: 19 knots Direction: 59° T

NOAA/NOS/CO-OPS 8723970 Vaca Key, FL

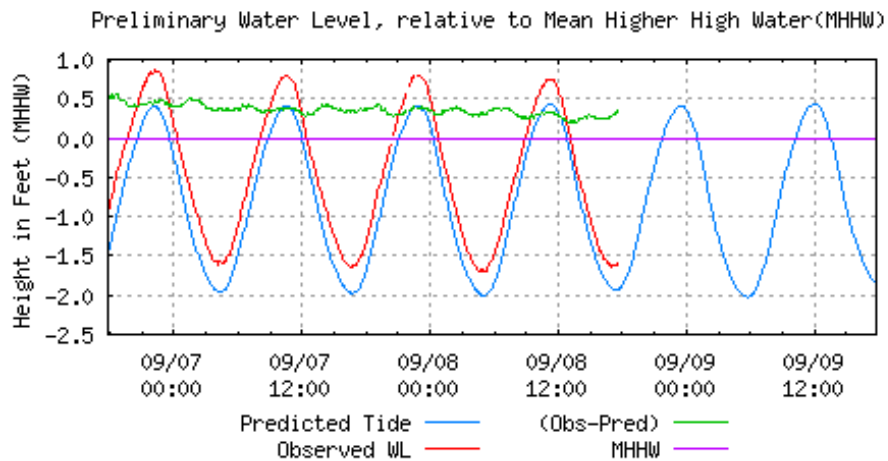


Last Observed Sample: 09/08/2017 17:42 (EDT)

Barometric Pressure: 1008.2 mb



NOAA/NOS/CO-OPS 8723214 Virginia Key, FL



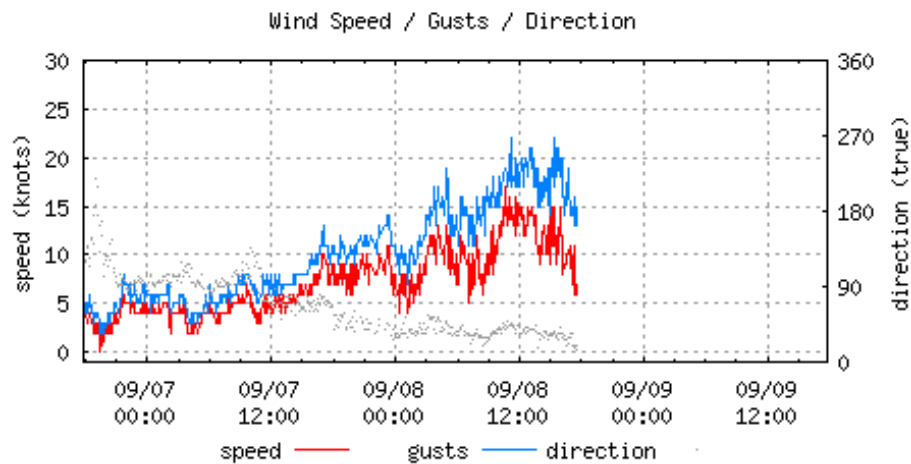
Last Observed Sample: 09/08/2017 17:42 (EDT). Data relative to MHHW

Observed: -1.55 ft. Predicted: -1.92 ft. Residual: 0.37 ft.

Historical Maximum Water Level: Oct 24 2005, 2.58 ft.

Next High Tide: 09/08/2017 23:29 (EDT), 0.41 ft.

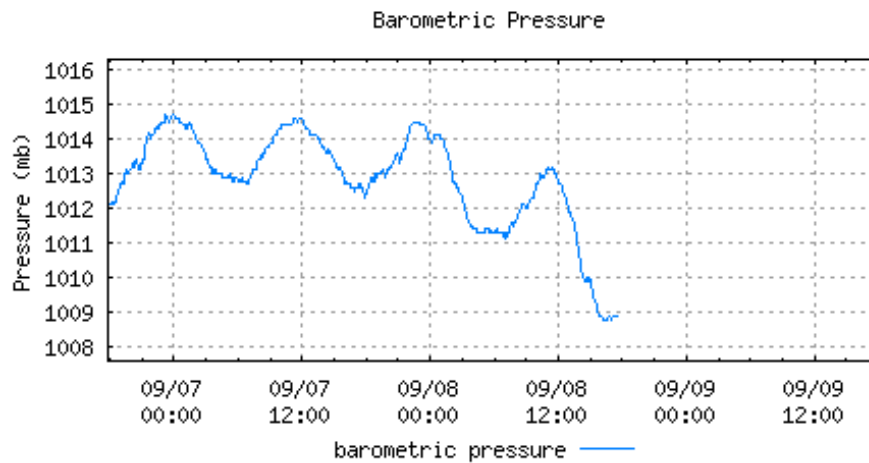
NOAA/NOS/CO-OPS 8723214 Virginia Key, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Wind Speed: 9 knots Gusts: 14 knots Direction: 27° T

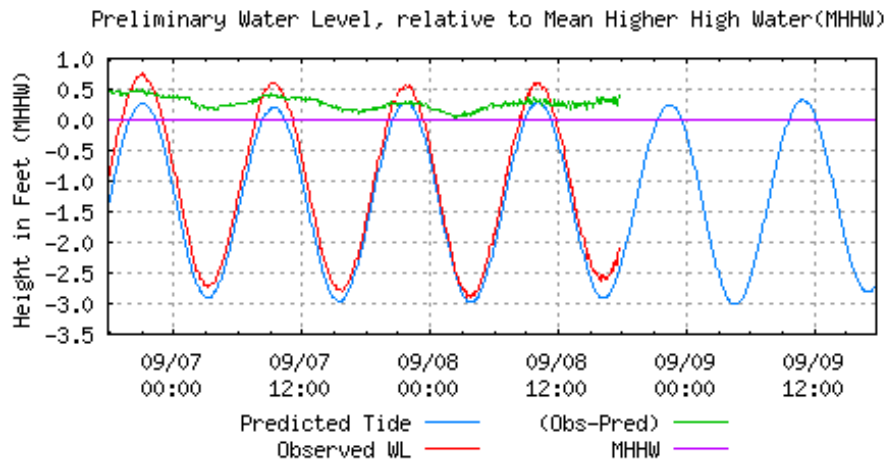
NOAA/NOS/CO-OPS 8723214 Virginia Key, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Barometric Pressure: 1008.9 mb

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL



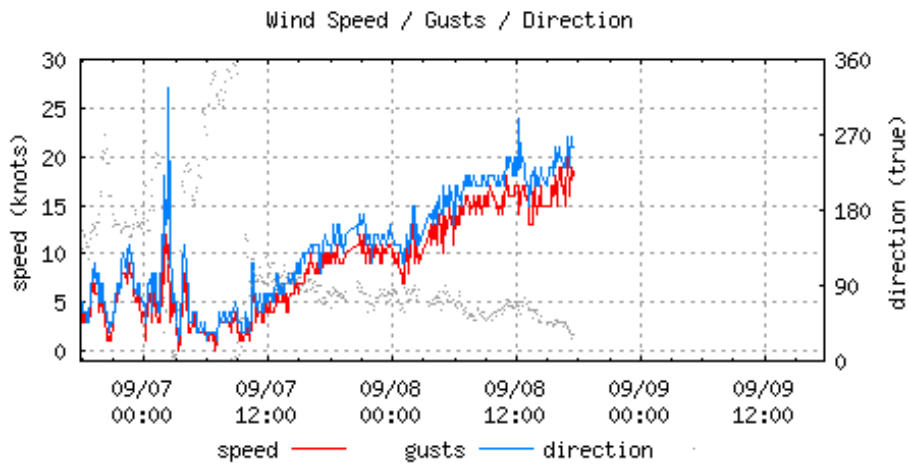
Last Observed Sample: 09/08/2017 17:42 (EDT). Data relative to MHHW

Observed: -2.08 ft. Predicted: -2.47 ft. Residual: 0.39 ft.

Historical Maximum Water Level: Oct 28 2012, 2.00 ft.

Next High Tide: 09/08/2017 22:26 (EDT), 0.24 ft.

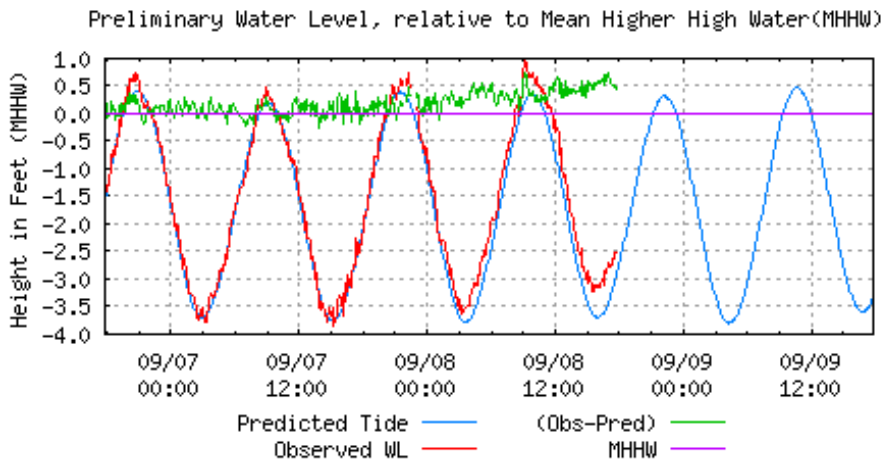
NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Wind Speed: 20 knots Gusts: 22 knots Direction: 38° T

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL



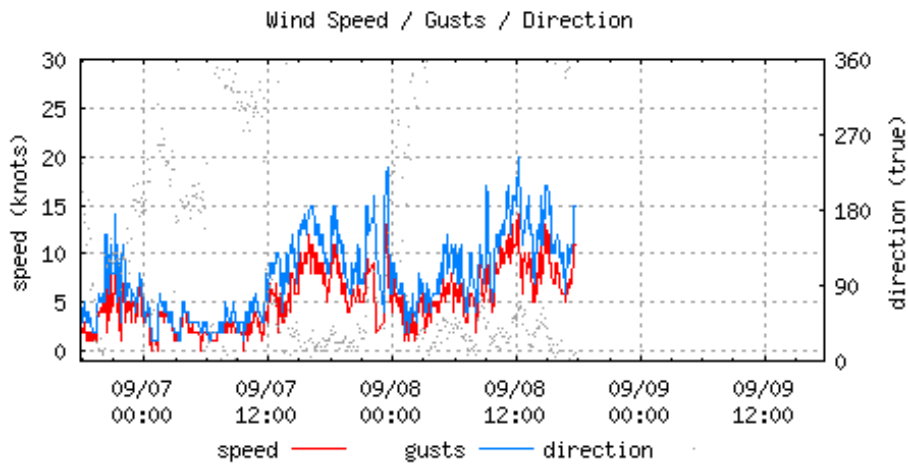
Last Observed Sample: 09/08/2017 17:42 (EDT). Data relative to MHHW

Observed: -2.52 ft. Predicted: -2.96 ft. Residual: 0.44 ft.

Historical Maximum Water Level: Sep 26 2004, 4.01 ft.

Next High Tide: 09/08/2017 22:14 (EDT), 0.32 ft.

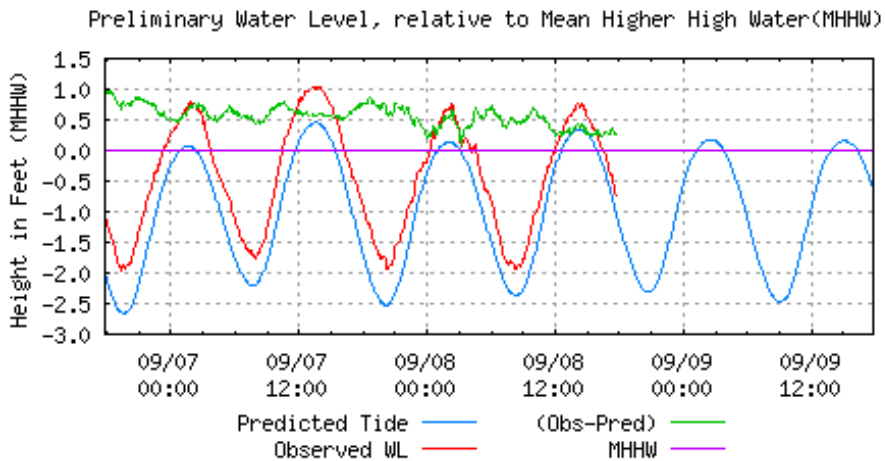
NOAA/NOS/CO-OPS 8721604 Trident Pier, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Wind Speed: 11 knots Gusts: 15 knots Direction: 9° T

NOAA/NOS/CO-OPS 8725110 Naples, FL



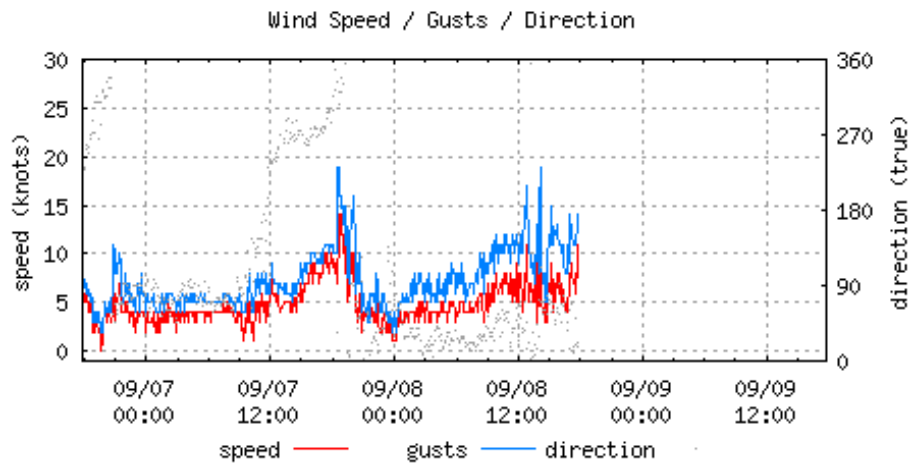
Last Observed Sample: 09/08/2017 17:48 (EDT). Data relative to MHHW

Observed: -0.79 ft. Predicted: -1.09 ft. Residual: 0.30 ft.

Historical Maximum Water Level: Dec 21 1972, 3.11 ft.

Next High Tide: 09/09/2017 02:31 (EDT), 0.17 ft.

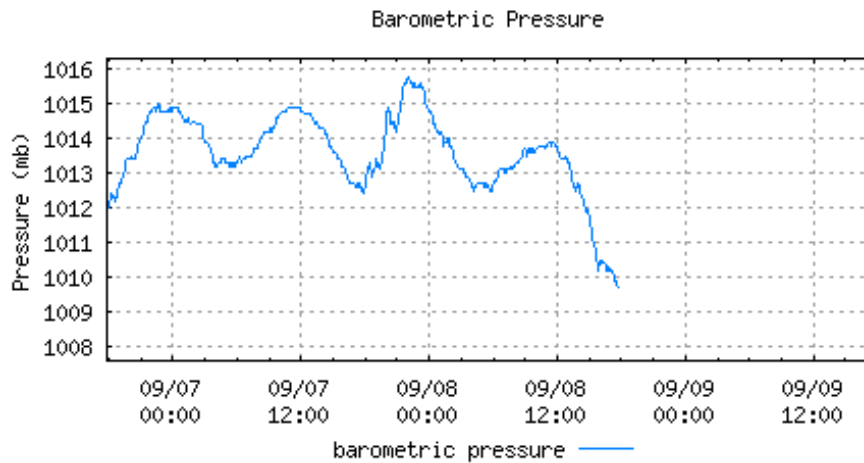
NOAA/NOS/CO-OPS 8725110 Naples, FL



Last Observed Sample: 09/08/2017 17:48 (EDT)

Wind Speed: 11 knots Gusts: 14 knots Direction: 18° T

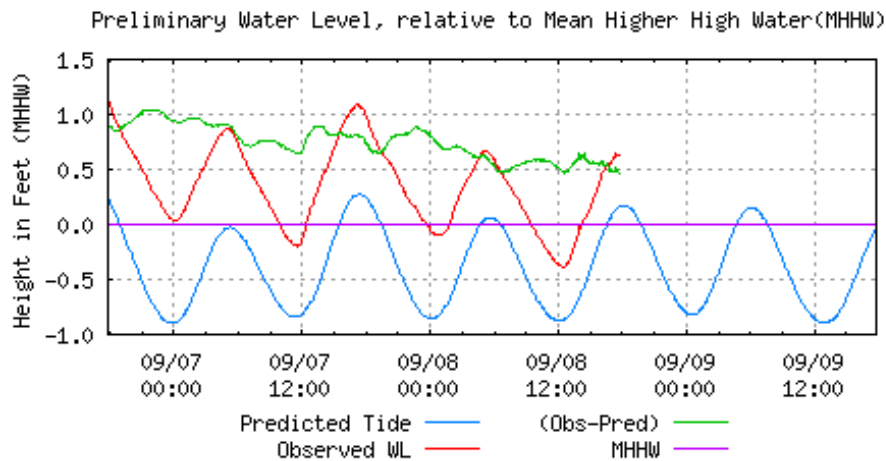
NOAA/NOS/CO-OPS 8725110 Naples, FL



Last Observed Sample: 09/08/2017 17:48 (EDT)

Barometric Pressure: 1009.7 mb

NOAA/NOS/CO-OPS 8725520 Fort Myers, FL



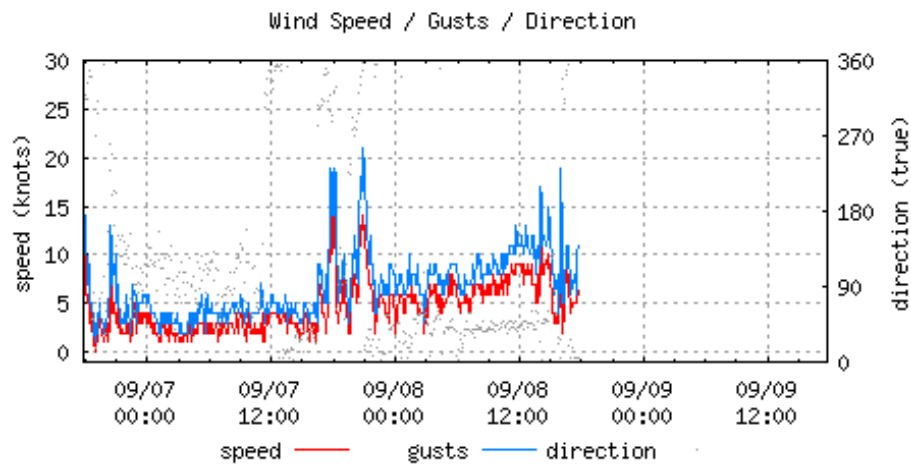
Last Observed Sample: 09/08/2017 17:42 (EDT). Data relative to MHHW

Observed: 0.63 ft. Predicted: 0.16 ft. Residual: 0.47 ft.

Historical Maximum Water Level: Nov 23 1988, 3.41 ft.

Next High Tide: 09/08/2017 18:06 (EDT), 0.18 ft.

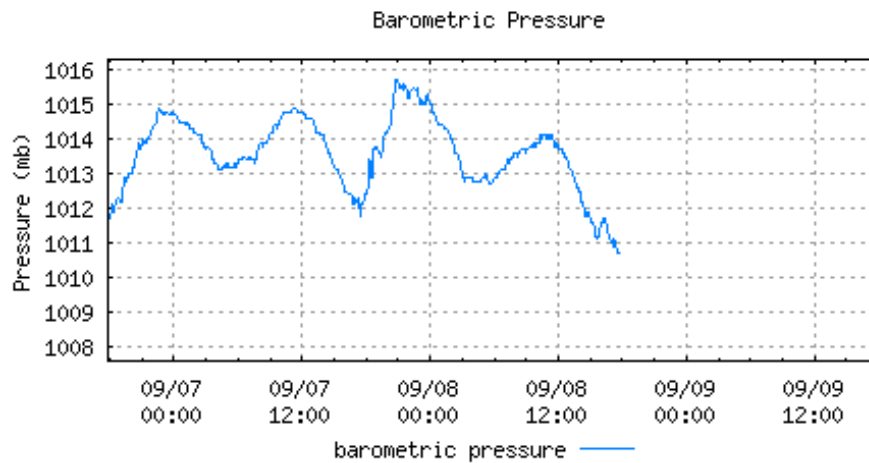
NOAA/NOS/CO-OPS 8725520 Fort Myers, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Wind Speed: 6 knots Gusts: 11 knots Direction: 6° T

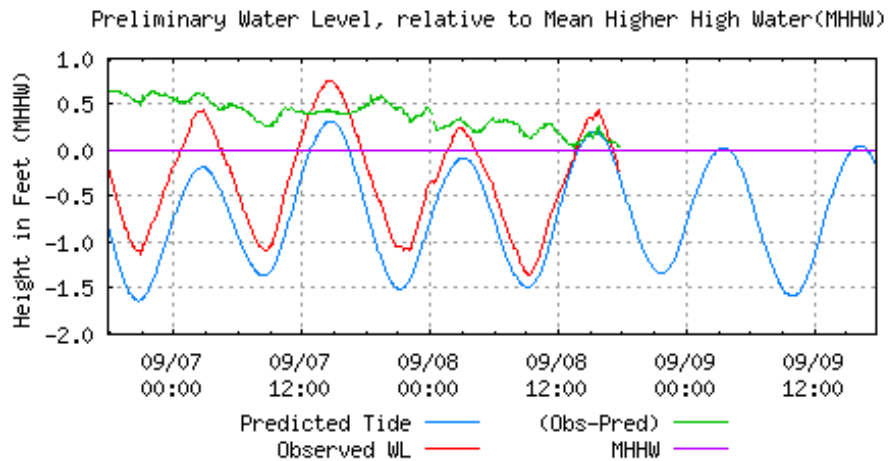
NOAA/NOS/CO-OPS 8725520 Fort Myers, FL



Last Observed Sample: 09/08/2017 17:42 (EDT)

Barometric Pressure: 1010.7 mb

NOAA/NOS/CO-OPS 8726384 Port Manatee, FL



Last Observed Sample: 09/08/2017 17:42 (EDT). Data relative to MHHW

Observed: -0.22 ft. Predicted: -0.27 ft. Residual: 0.05 ft.

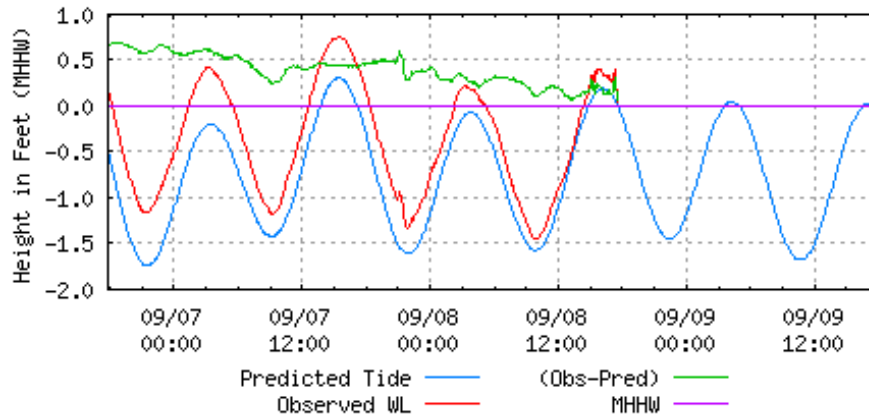
Historical Maximum Water Level: Sep 6 2004, 2.29 ft.

Next High Tide: 09/09/2017 03:32 (EDT), 0.03 ft.



NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/08/2017 17:36 (EDT). Data relative to MHHW

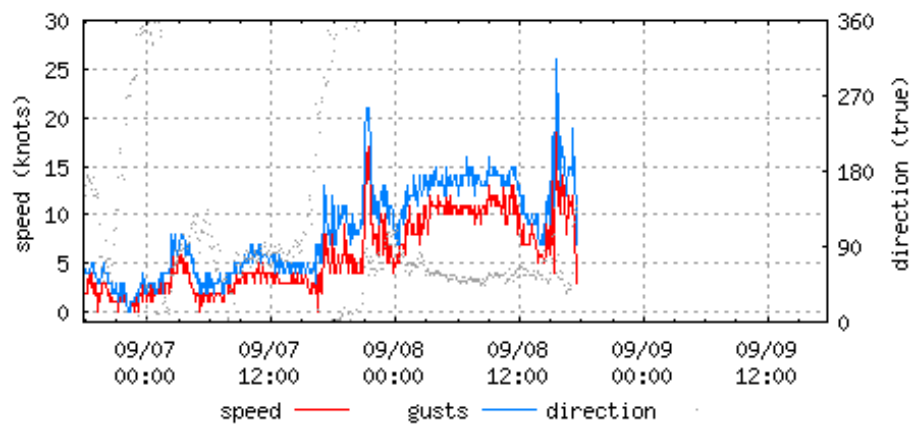
Observed: 0.05 ft. Predicted: -0.01 ft. Residual: 0.06 ft.

Historical Maximum Water Level: Aug 31 1985, 4.00 ft.

Next High Tide: 09/09/2017 04:14 (EDT), 0.05 ft.

NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL

Wind Speed / Gusts / Direction



Last Observed Sample: 09/08/2017 17:36 (EDT)

Wind Speed: 3 knots Gusts: 7 knots Direction: 132° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8724580	Key West, FL	09/08/2017 17:48 (EDT)	-1.11 ft	-1.41 ft	0.30 ft	0.40 ft
8723970	Vaca Key, FL	09/08/2017 17:42 (EDT)	0.38 ft	0.15 ft	0.23 ft	0.47 ft
8723214	Virginia Key, FL	09/08/2017 17:42 (EDT)	-1.55 ft	-1.92 ft	0.37 ft	0.79 ft
8722670	Lake Worth Pier, FL	09/08/2017 17:42 (EDT)	-2.08 ft	-2.47 ft	0.39 ft	0.62 ft
8721604	Trident Pier, FL	09/08/2017 17:42 (EDT)	-2.52 ft	-2.96 ft	0.44 ft	0.96 ft
8725110	Naples, FL	09/08/2017 17:48 (EDT)	-0.79 ft	-1.09 ft	0.30 ft	0.78 ft
8725520	Fort Myers, FL	09/08/2017 17:42 (EDT)	0.63 ft	0.16 ft	0.47 ft	1.05 ft
8726384	Port Manatee, FL	09/08/2017 17:42 (EDT)	-0.22 ft	-0.27 ft	0.05 ft	0.46 ft
8726520	St Petersburg, Tampa Bay, FL	09/08/2017 17:36 (EDT)	0.05 ft	-0.01 ft	0.06 ft	0.40 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce